

Applicants : Jorma Virtanen
Serial No. : 09/120,049
Filed : July 21, 1998
For : OPTICAL DISK-BASED ASSAY DEVICES AND METHODS
Examiner : Unassigned
Art Unit : 1632



Hon. Assistant Commissioner for Patents
Washington, D.C. 20231

TRANSMITTAL LETTER FOR
INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith is an Information Disclosure Statement in the above-identified application. This Statement is submitted:

- ☐ within three months of the application filing date;
- ☒ more than three months from the application filing date but before the mailing date of the first Office Action on the merits.

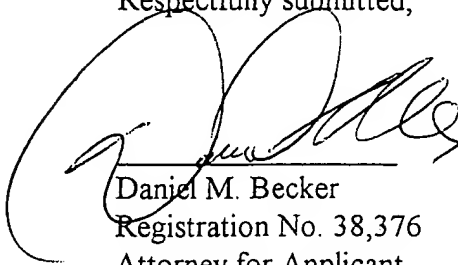
In accordance with 37 C.F.R. § 1.98, submission of this Statement requires no fee. However, if for any reason a fee is due, the Commissioner is hereby authorized to charge

payment of any fees required in connection with this Information Disclosure Statement to
Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

11/11/98

Date



Daniel M. Becker
Registration No. 38,376
Attorney for Applicant

c/o FISH & NEAVE
1251 Avenue of the Americas
New York, New York 10020-1104
Tel.: (650) 617-4000

I hereby Certify that this
Correspondence is being
Deposited with the U.S.
Postal Service as First
Class Mail in an Envelope
Addressed to: ASSISTANT
COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231, ON

November 12, 1998

MARTHA D. JOHNSON

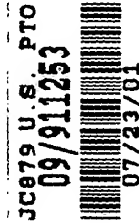

Signature of Person Signing

PATENT
BURST-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jorma Virtanen
Serial No. : 09/120,049
Filed : July 21, 1998
For : OPTICAL DISK-BASED ASSAY
DEVICES AND METHODS
Group : 1632

Hon. Asst. Commissioner of Patents
and Trademarks
Washington, D.C. 20231



INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98,
applicants hereby make the following documents of record in
the above identified application.*

U.S. Patents

Sundberg et al.	5,624,711	04/1997
Respass	5,599,662	02/1997
Yashiro	5,580,696	12/1996
Fodor et al.	5,510,270	04/1996
Fodor et al.	5,489,678	02/1996
de Rooij et al.	5,462,839	10/1995
Fodor et al.	5,445,934	08/1995
Matson et al.	5,429,807	07/1995
Fodor et al.	5,424,186	06/1995
McGall et al.	5,412,087	05/1995
Pirrung et al.	5,405,783	04/1995

*Applicants reserve the right to challenge any of the cited
references as prior art.

U.S. Patents (cont.)

Winkler et al.	5,384,261	01/1995
Semancik et al.	5,345,213	09/1994
Ikeda et al.	5,334,837	08/1994
Parce et al.	5,278,048	01/1994
Oh et al.	5,168,057	12/1992
Hafeman et al.	5,164,319	11/1992
Chow et al.	5,112,134	05/1992
Ertinghausen	5,087,556	02/1992
Gries et al.	5,021,236	06/1991
Hayes et al.	4,877,745	10/1989
Virtanen et al.	4,756,971	07/1988
Carter et al.	4,608,344	08/1986
Carter et al.	RE 33,064	09/1989
Dattagupta et al.	4,542,102	09/1985
Gansow et al.	4,472,509	09/1984
Tom et al.	B1 4,366,241	10/1988
Gibbons et al.	4,287,300	09/1981
Maggio	4,277,437	07/1981
Litman et al.	4,275,149	06/1981
Maggio et al.	4,233,402	11/1980
Ullman	4,160,645	07/1979
Maier, Jr.	4,104,029	08/1978
Edwards et al.	4,062,733	12/1977
Chari	4,037,257	07/1977
Ullman et al.	3,996,345	12/1976
Kronick et al.	3,939,350	02/1976
Schuurs et al.	3,850,752	11/1974
Harris et al.	3,817,838	06/1974
Rubenstein et al.	3,817,837	06/1974
Schuurs et al.	3,791,932	02/1974
Schuurs et al.	B1 3,654,090	07/1982
Catt	3,646,346	02/1972

Foreign Patent Publications

WIPO	WO 98/28623	07/1998
WIPO	WO 98/07019	02/1998
WIPO	WO 96/09548	03/1996
WIPO	WO 95/34890	12/1995
Europe	0 504 432 A1	09/1992
Europe	0 417 305 A1	03/1991
Europe	0 392 475 A2	10/1990

Other Documents

Butcher, A. et al., "Using PCR for Detection of HIV-1 Infection,"
Clinical Immunology Newsletter, 12(5):73-76 (1992).

- Cheng, J. et al., "Preparation and Hybridization Analysis of DNA/RNA from *E. Coli* on Microfabricated Bioelectronic Chips," Nature Biotechnology, 16(6):541-546 (1998).
- Diamandis, E. et al. (eds.), Immunoassay, Academic Press (1996).
- Fodor, S.P.A. et al., "Multiplexed Biochemical Assays with Biological Chips," Nature, 364(6437):555-556 (1993).
- Given, A.L., Flow Cytometry, First Principles, Wiley-Liss, New York, N.Y. (1992).
- Gosling, J.P. et al. (eds.), Immunoassay: Laboratory Analysis and Clinical Applications, Butterworth-Heinemann, Newton, Massachusetts (1994).
- Green, F.J., The Sigma-Aldrich Handbook of Stains, Dyes and Indicators, Aldrich Chemical Company Inc., Milwaukee, Wisconsin (1991).
- Hayat, M.A. (ed.), Immunogold-Silver Staining, CRC Press (1995).
- Jackman, R.J. et al., "Fabrication of Submicrometer Features on Curved Substrates by Microcontact Printing," Science, 269:664-666 (1995).
- Law, B. (ed.), Immunoassay, A Practical Guide, Taylor & Francis, Great Britain (1996).
- Nilsson, M. et al., "Padlock Probes: Circularizing Oligonucleotides for Localized DNA Detection," Science, 265:2085-2088 (1994).
- Robinson, J.P. (ed.), Handbook of Flow Cytometry Methods, Wiley-Liss, New York, N.Y. (1993).
- Szathmary, E., "The First Two Billion Years," Nature, 387(6634):662-663 (1997).

Copies of the foregoing documents are submitted herewith.

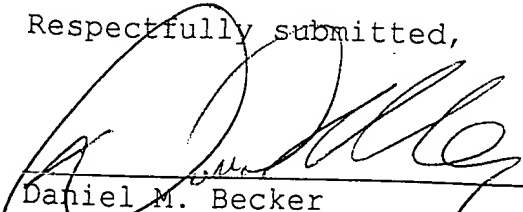
It is respectfully requested that these documents be (1) fully considered by the Patent and Trademark Office during the examination of this application; and (2) printed on any

patent that may issue on this application. Applicant requests that a copy of Form PTO-1449 (submitted in duplicate herewith), as considered and initialed by the Examiner, be returned with the next communication.

An early and favorable action is respectfully requested.

Respectfully submitted,

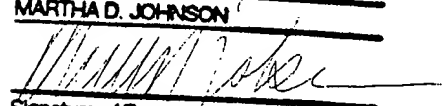
11/11/98
Date


Daniel M. Becker
Reg. No. 38,376
Attorney for Applicants

I hereby Certify that this
Correspondence is being
Deposited with the U.S.
Postal Service as First
Class Mail in an Envelope
Addressed to: ASSISTANT
COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231, ON

c/o FISH & NEAVE
1251 Avenue of the Americas
New York, N.Y. 10020
(650) 617-4000

NOVEMBER 12, 1998
MARTHA D. JOHNSON


Signature of Person Signing

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
BURST-2

SERIAL NO.
09/120,049

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

APPLICANT
Jorma Virtanen

FILING DATE
July 21, 1998

GROUP
1632

JCE879 U.S. PTO
09/911253
07/28/01

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,624,711	04/1997	Sundberg et al.	427	261	
	5,599,662	02/1997	Respass	435	5	
	5,580,696	12/1996	Yashiro	430	270.17	
	5,510,270	04/1996	Fodor et al.	436	518	
	5,489,678	02/1996	Fodor et al.	536	22.1	
	5,462,839	10/1995	deRooij et al.	430	320	
	5,445,934	08/1995	Fodor et al.	435	6	
	5,429,807	07/1995	Matson et al.	422	131	
	5,424,186	06/1995	Fodor et al.	435	6	
	5,412,087	05/1995	McGall et al.	536	24.3	
	5,405,783	04/1995	Pirrung et al.	436	518	
	5,384,261	01/1995	Winkler et al.	436	518	
	5,345,213	09/1994	Semancik et al.	338	34	
	5,334,837	08/1994	Ikeda et al.	250	339	
	5,278,048	01/1994	Parce et al.	436	29	
	5,168,057	12/1992	Oh et al.	435	174	
	5,164,319	11/1992	Hafeman et al.	435	291	
	5,112,134	05/1992	Chow et al.	356	427	
	5,087,556	02/1992	Ertinghausen	435	7.9	
	5,021,236	06/1991	Gries et al.	424	9	
	4,877,745	10/1989	Hayes et al.	436	166	
	4,756,971	07/1988	Virtanen et al.	428	405	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
BURST-2

SERIAL NO.
09/120,049

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

APPLICANT
Jorma Virtanen

FILING DATE
July 21, 1998

GROUP
1632

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,608,344	08/1986	Carter et al.	436	34	
	RE33,064	09/1989	Carter et al.	436	34	
	4,542,102	09/1985	Dattagupta et al.	435	6	
	4,472,509	09/1984	Gansow et al.	436	548	
	B1 4,366,241	10/1988	Tom et al.	435	7	
	4,287,300	09/1981	Gibbons et al.	435	5	
	4,277,437	07/1981	Maggio	422	61	
	4,275,149	06/1981	Litman et al.	435	7	
	4,233,402	11/1980	Maggio et al.	435	7	
	4,160,645	07/1979	Ullman	23	230B	
	4,104,029	08/1978	Maier, Jr.	23	230B	
	4,062,733	12/1977	Edwards et al.	195	103.7	
	4,037,257	07/1977	Chari	360	51	
	3,996,345	12/1976	Ullman et al.	424	12	
	3,939,350	02/1976	Kronick et al.	250	365	
	3,850,752	11/1974	Schuurs et al.	195	103.5R	
	3,817,838	06/1974	Harris et al.	195	103.5R	
	3,817,837	06/1974	Rubenstein et al.	195	103.5R	
	3,791,932	02/1974	Schuurs et al.	195	103.5R	
	B1 3,654,090	07/1982	Schuurs et al.	435	7	
	3,646,346	02/1972	Catt	250	83	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. BURST-2	SERIAL NO. 09/120,049
	APPLICANT Jorma Virtanen	
	FILING DATE July 21, 1998	GROUP 1632

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS						TRANSLATION	
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	WO 98/28623	07/1998	WIPO	G01N	33/543	X	
	WO 98/07019	02/1998	WIPO	G01N	21/07	X	
	WO 96/09548	03/1996	WIPO	G01N	33/543	X	
	WO 95/34890	12/1995	WIPO	G11B	7/00	X	
	0 504 432 A1	09/1992	EP	G01N	33/543	X	
	0 417 305 A1	03/1991	EP	G01N	35/00	X	
	0 392 475 A2	10/1990	EP	G01N	1/28	X	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Butcher, A. et al., "Using PCR for Detection of HIV-1 Infection," <u>Clinical Immunology Newsletter</u> , 12(5):73-76 (1992).
	Cheng, J. et al., "Preparation and Hybridization Analysis of DNA/RNA from <i>E. Coli</i> on Microfabricated Bioelectronic Chips," <u>Nature Biotechnology</u> , 16(6):541-546 (1998).
	Diamandis, E. et al. (eds.), <u>Immunoassay</u> , Academic Press (1996).
	Fodor, S.P.A. et al., "Multiplexed Biochemical Assays with Biological Chips," <u>Nature</u> , 364(6437):555-556 (1993).
	Given, A.L., <u>Flow Cytometry, First Principles</u> , Wiley-Liss, New York, N.Y. (1992).
	Gosling, J.P. et al. (eds.), <u>Immunoassay: Laboratory Analysis and Clinical Applications</u> , Butterworth-Heinemann, Newton, Massachusetts (1994).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
BURST-2

SERIAL NO.
09/120,049

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

APPLICANT
Jorma Virtanen

FILING DATE
July 21, 1998

GROUP
1632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Green, F.J., The Sigma-Aldrich Handbook of Stains, Dyes and Indicators, Aldrich Chemical Company Inc., Milwaukee, Wisconsin (1991).

Hayat, M.A. (ed.), Immunogold-Silver Staining, CRC Press (1995).

Jackman, R.J. et al., "Fabrication of Submicrometer Features on Curved Substrates by Microcontact Printing," Science, 269:664-666 (1995).

Law, B. (ed.), Immunoassay, A Practical Guide, Taylor & Francis, Great Britain (1996).

Nilsson, M. et al., "Padlock Probes: Circularizing Oligonucleotides for Localized DNA Detection," Science, 265:2085-2088 (1994).

Robinson, J.P. (ed.), Handbook of Flow Cytometry Methods, Wiley-Liss, New York, N.Y. (1993).

Szathmary, E., "The First Two Billion Years," Nature, 387(6634):662-663 (1997).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.